

Title (en)
SIGNAL DETECTING SENSOR PROVIDED WITH MULTI-ELECTRODE

Title (de)
SIGNALDETEKTIONSSENSOR MIT MEHRFACHELEKTRODE

Title (fr)
CAPTEUR DE DETECTION DE SIGNAUX POURVU DE MULTIPLES ELECTRODES

Publication
EP 1406086 A4 20071031 (EN)

Application
EP 02733327 A 20020605

Priority
• JP 0205569 W 20020605
• JP 2001170340 A 20010605

Abstract (en)
[origin: EP1406086A1] A sensor is provided with a plurality of electrodes disposed on a substrate for individually measuring each of the signals produced by biological samples held separately by each electrode, in which these electrodes comprise e.g. a biological sample-holding dent, a through-hole communicating with the dent and penetrating to the rear surface of the substrate, and an electrode element. A sensor is provided with a plurality of electrodes disposed on a substrate for individually measuring each of the signals produced by biological samples held separately by each electrode, in which these electrodes comprise a biological sample-holding dent, a through-hole communicating with the dent and penetrating to the rear surface of the substrate, an electrode element, and a lead wire from the electrode element, each of which is so disposed that samples each held in the dent are electrically linked with one another. Independent claims are also included for the following: (1) An intercellular network analyzer equipped with the sensor, a means for housing cells disposed on the sensor, a means for maintaining conditions under which the cells in the container on such sensor can proliferate, a means to hold tightly the samples onto various electrodes of the sensors, a means to obtain electrical signals from the different electrodes, and a means for treating such electrical signals; and (2) A high-speed drug screening device equipped with the sensor, a means for housing cells disposed on the sensor, a means for maintaining conditions under which the cells in the container on such sensor can proliferate, a means for moving the cell container to the installed sensor, a means to hold tightly the samples onto various electrodes of the sensors, a means to obtain electrical signals from the different electrodes, and a means for treating such electrical signals.

IPC 1-7
G01N 27/30; **G01N 27/416**; **G01N 33/483**; **C12M 1/34**; **C12Q 1/34**

IPC 8 full level
C12M 1/34 (2006.01); **G01N 33/483** (2006.01); **G01N 33/487** (2006.01)

CPC (source: EP US)
G01N 33/48728 (2013.01 - EP US)

Citation (search report)
• [X] DE 19948473 A1 20010412 - NMI UNIV TUEBINGEN [DE], et al
• See references of WO 02099408A1

Cited by
FR2904872A1; WO2008100287A3; WO2008017651A1; US10690624B2; CN108474759A; EP3379242A4; EP3882619A1; EP3882620A1; EP3882621A1; EP3882622A1

Designated contracting state (EPC)
DE DK FR GB

DOCDB simple family (publication)
EP 1406086 A1 20040407; **EP 1406086 A4 20071031**; JP 3570715 B2 20040929; JP WO2002099408 A1 20040916; US 2004167723 A1 20040826; US 7006929 B2 20060228; WO 02099408 A1 20021212

DOCDB simple family (application)
EP 02733327 A 20020605; JP 0205569 W 20020605; JP 2003502479 A 20020605; US 47993803 A 20031205